

Abstract of the Disclosure

A method and apparatus for conserving power in a positioning system receiver using ranging signals to determine a state of motion of the receiver, the method including: a step (32) of performing at least a predetermined number of solutions of the state of motion of the receiver using a filter solution based on a variable mix of models of the motion of the receiver, and of providing the model mix used in each solution; and a step (35) of adopting a partial duty cycle indicating a percentage of time selected receiver components are powered on, based on the mix of models used in successive solutions. Typically, the receiver includes a radiofrequency (RF) front end module and a baseband processor module and the selected components that are powered on and off to save power typically include the RF front end module and the baseband processor module.